## **Appendix Table 5-64**

## U.S. utility patents citing S&E literature, by patent assignee sector, article author sector, and patent issue year: 2011-14

Patent assignee sector and article sector	2011	2012	2013	2014
	USPTO utility patents			
All utility patents	224,876	253,630	278,515	296,084
Patents citing S&E literature, all assignee sectors	51,361	58,197	65,654	72,435
Foreign	19,211	22,474	25,191	27,540
Unknown country	1,364	220	238	276
United States	30,786	35,503	40,225	44,619
Government	565	606	735	769
Private	26,252	29,600	33,616	37,579
Academic	3,464	3,981	4,420	4,710
Other	238	255	274	294
No information on organization or unclassified	267	1,062	1,179	1,268
	S&E articles			
All S&E articles, all article author sectors	12,112,690	12,833,863	13,621,887	14,511,456
All cited S&E articles, all article author sectors	233,502	255,965	280,536	302,485
Foreign	121,793	134,989	151,773	164,358
Unknown country	4,052	4,221	4,451	4,373
United States	107,658	116,755	124,312	133,755
Federal government	5,960	6,097	6,459	6,676
Industry	18,712	19,393	20,388	21,592
Academic	69,333	76,703	82,345	89,414
FFRDCs	2,118	2,387	2,522	2,864
Nonprofit	7,354	7,750	7,934	8,237
State/local government	186	189	217	216
Joint/unknown sectors	3,831	4,065	4,292	4,602
	Citations from USPTO utility patents to S&E articles			
All citations, all article author sectors	490,246	537,288	615,493	688,652
Foreign	239,129	266,602	314,849	356,013
Unknown country	8,163	8,943	9,865	10,228
United States	242,954	261,743	290,779	322,412
Federal government	12,206	12,416	13,017	13,877



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Patent assignee sector and article sector	2011	2012	2013	2014
Industry	47,047	49,426	53,487	60,629
Academic	152,332	166,201	188,158	207,951
FFRDCs	4,761	5,316	5,832	6,743
Nonprofit	17,053	17,926	18,720	20,405
State/local government	405	435	466	488
Joint/unknown sectors	8,801	9,682	10,695	11,885

NOTES:

FFRDC = federally funded research and development center; USPTO = U.S. Patent and Trademark Office.

Article/citation counts are from the set of journals covered by Scopus. Articles are assigned to a sector on the basis of the institutional address(es) listed in the article. Articles/citations are credited on a fractional-count basis (i.e., for articles with collaborating institutions from multiple sectors, each sector receives fractional credit on the basis of the proportion of its participating institutions). Citation counts are based on an 11-year window with a 5-year lag (e.g., citations for 2012 are references in U.S. patents issued in 2012 to articles published in 1997–2007). Article counts are a sum of articles in the cited-year window. Detail may not add to total because of rounding. Data in the table are not comparable to previous versions due to changes in the cited-year window.

SOURCES:

National Science Foundation, National Center for Science and Engineering Statistics; SRI International; Science-Metrix; LexisNexis and USPTO data; Elsevier, Scopus abstract and citation database (www.scopus.com).

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